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45502 7590 12/12/2012 Yudell Isidore Ng Russell PLLC 8911 N. Capital of Texas Hwy.,			EXAMINER	
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# Please find below and/or attached an Office communication concerning this application or proceeding.

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# Application No. Applicant(s) 09/583,346 DUTTA, RABINDRANATH Office Action Summary Examiner Art Unit JAVID A. AMINI 2678 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 23 August 2012. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) An election was made by the applicant in response to a restriction requirement set forth during the interview on the restriction requirement and election have been incorporated into this action. 4) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 5) Claim(s) 2-8,11,12,14-17,20,21,23-26 and 28-35 is/are pending in the application. 5a) Of the above claim(s) is/are withdrawn from consideration. 6) ☐ Claim(s) is/are allowed. 7) Claim(s) 2-8,11,12,14-17,20,21,23-26 and 28-35 is/are rejected. 8) Claim(s) \_\_\_\_\_ is/are objected to. 9) Claim(s) are subject to restriction and/or election requirement. \* If any claims have been determined allowable, you may be eligible to benefit from the Patent Prosecution Highway program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init\_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov. Application Papers 10) The specification is objected to by the Examiner. 11) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some \* c) ☐ None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. \_ 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

U.S. Patent and Trademark Office PTOL-326 (Rev. 09-12)

Notice of References Cited (PTO-892)

Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

4) Other:

# Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 8/23/2012 has been entered.

# Response to Arguments

Applicant's arguments filed 8/23/2012 have been fully considered but they are not persuasive.

Applicant amended the claims to emphasis the portable device determines the orientation of the data page.

Examiner believes both of Register and Rebel's portable devices are capable to switch data page from e.g., a vertically orientation into another (i.e. horizontally) orientation. It would have been obvious to one of ordinary skill in the art to recognize the process analyzed the data page, because the display mode changes from vertical to horizontal mode.

Examiner provides an example of a portable device without the capability of changing modes, then a user may not be able switch data page from e.g., a vertically orientation into

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another (i.e. horizontally) orientation. The point is the device determines switching data page from e.g., a vertically orientation into another (i.e. horizontally) orientation.

# Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(a):

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

Claims 2-8, 11-12, 14-17, 20-21, 23-26, 28-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims 29-30 contain subject matter "analyzing the data page" which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 31-34 contain analyzing a line width of textual content, but the analysis of the line width is not clear how is done, e.g., the line width contains letters of alphabet, how does it work with different font sizes? What if the data page is a picture/image in a web page?

All dependent claims are rejected with the same reasons as set forth in their independent claims 28-30.

Examiner's notes: F.Y.I. page 7 or any other pages of the specification does not describe in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. e.g., see the following NPLs illustrating

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algorithms, fuzzy method and comparing objects in order to recognize the object/line orientation on a page. E.g., the cited NPL Chen et al. illustrates that his system can automatically classify natural elements in the image by the characteristics of image features without too many subjective opinions using fuzzy clustering. Or Kayanuma et al. propose a new approach to detect a three-dimensional (3-D) object and to estimate its position and orientation, in view of ordinary skill in the art that object can be considered anything e.g. a line text with 3-D fonts and so on. A person skill in the art would like to be able to examine how the orientation drives from the line width.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

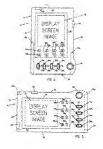
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-8, 11-12, 14-17, 20-21, 23-26, 28-30, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register 5661632, and further in view of Reber et al. 6453173, hereinafter Reber.

Claim 28.

Register teaches a method for displaying data on a portable device having a display that is significantly larger in a first dimension than in a second dimension, said method comprising: see figs. 4-5 i.e. self-explanatory, below:

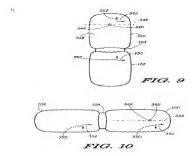
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Register teaches receiving a data page in the portable device #22 from input output #116, 112 and 110 PCMCIA, the data page is the data that displayed on display area; Register teaches the portable device determining, by analyzing the data page an orientation for presentation of the data page relative to the first and second dimensions of the display; and the portable device automatically displaying the data page in a first orientation within the display in response to determining the first orientation and the portable device automatically displaying the data page in a different second orientation within the display in response to determining the second orientation, see figs. 4-5 above, they are self-explanatory (i.e. Examiner believes in view of steps in the claimed invention (e.g., claim 28) the prior art Register in figs. 4-5 teaches the steps of the claim, because the display screen image #26 of fig. 4 is displayed in a second orientation (see fig. 5 #52), and this would have been obvious to one of ordinary skill in the art to equate as analyzing the data page i.e. the display screen image #26 of fig. 4 into #52 of fig. 5), but Register does not teaches automatically displaying the data page in a first and a second orientations within the display.

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Reber teaches automatically displaying the data page in first and second orientations within the display. Reber at col. 13 lines 4-10 discloses the embodiment described with reference to FIGS. 9 and 10 is advantageous in automatically varying the scanning axis of the light beam in dependence upon the orientation of the handheld device. Regardless of whether the handheld device is oriented to display content in a portrait mode (FIG. 9) or in a landscape mode (FIG. 10), the light beam is scanned horizontally to read horizontally-oriented bar codes, see col. 13 lines 4-10.



Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Reber's light beam into Register's toggle switches in order automatically varying an axis of a scanning light beam in dependence upon an orientation of the handheld device.

Claims 29 and 35 are rejected with similar reasons as set forth in claim 28, above.

Claim 30 is rejected with similar reasons as set forth in claim 28, above. Except the computer program product and a computer-readable storage medium, Register teaches a hard disk #114 in

fig. 6; Register teaches instructions embodied within the storage medium that cause the portable data processing device to receive the data page within the portable data processing device, see flow chart of a software of fig. 7, the rest of the features are similar to features of claim 28, see above

# Claim 2.

The method of claim 28, wherein the data page is received over a wireless connection, Register in fig. 4 illustrates a PDA that contains a wireless connection.

#### Claim 3.

The method of claim 28, wherein the second orientation is a ninety-degree rotation of the first orientation, Register in fig. 4 illustrates a PDA that contains the second orientation a ninety-degree rotation of the first orientation.

#### Claim 4

The method of claim 28, wherein the device comprises a display that is significantly larger in a first dimension than in a and second direction dimension are orthogonal to the first dimension, Register in fig. 4 illustrates a PDA.

#### Claim 5.

The method of claim 28, wherein: the data page is initially displayed by the portable device in one of the first and second orientations; the method further comprises the portable device redisplaying the data page is redisplayed in the other of the first and second orientations in response to a user input, Register in figs. 4-5 illustrates a PDA.

#### Claim 6.

The method of claim 28, wherein: the data page is initially displayed by the portable device in one of the first and second orientations; the method further comprises the portable device automatically redisplaying the data page is redisplayed in the other of the first and second orientations after a preset duration, it would have been obvious to skilled in the art to recognize that Register and Reber 's handheld devices redisplaying the data page in both orientations and of course there should be a delay period between the two orientations.

# Claim 7.

The method of claim 28, wherein in the portable device is a wireless telephone, Register in figs. 4-5 illustrates a PDA.

# Claim 8.

The method of claim 28, wherein the portable device is a personal digital assistant, Register in figs. 4-5 illustrates a PDA.

### Claim 11.

The portable data processing system of claim 29, wherein the portable data processing system further includes a wireless connection interface; and the data page is received by the portable data processing system over a wireless connection via the wireless connection interface.

Register in fig. 4 illustrates a PDA that contains a wireless connection.

# Claim 12.

The portable data processing system of claim 29, wherein the second orientation is a ninety-degree rotation of the first orientation, Register in fig. 4 illustrates a PDA that contains the second orientation a ninety-degree rotation of the first orientation.

### Claim 14.

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The portable data processing system of claim 29, wherein: the portable data processing system initially displays the data page in one of the first and second orientations; and instruction further cause the data processing system to redisplay the data page in the other of the first and second orientations in response to a user input Register in figs. 4-5 illustrates a PDA.

Claim 15.

The portable data processing system of claim 29, wherein: the data page is initially displayed by the portable data processing system in one of the first and second orientations: the instruction further cause the data processing system to automatically redisplay the data page in the other of the first and second orientations after a preset duration, it would have been obvious to skilled in the art to recognize that Register and Reber 's handheld devices redisplaying the data page in both orientations and of course there should be a delay period between the two orientations.

Claim 16.

The data processing system of claim 29, wherein the portable data processing system is a wireless telephone, Register in fig. 4 illustrates a PDA that contains a wireless connection.

Claim 17.

The data processing system of claim 29, wherein the portable data processing system is a personal digital assistant, Register in fig. 4 illustrates a PDA that contains the second orientation a ninety-degree rotation of the first orientation.

Claim 20.

The computer program product of claim 30, wherein the data page is received over a wireless connection, Register in fig. 4 illustrates a PDA that contains a wireless connection.

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Claim 21.

The computer program product of claim 30, wherein the second orientation is a ninetydegree rotation of the first orientation Register in fig. 4 illustrates a PDA that contains the second orientation a ninety-degree rotation of the first orientation.

Claim 23.

The computer program product of claim 30, wherein: the data page is initially displayed by the portable device in one of the first and second orientations; the computer program product further includes instructions that cause the portable data processing device to redisplay the data page in the other of the first and second orientations in response to a user input, the computer program is illustrated in fig. 7 of Register.

Claim 24.

The computer program product of claim 30, wherein: the data page is initially displayed by the portable device in one of the first and second orientations; the computer program product further includes instructions that cause the portable data processing device to automatically redisplay the data page is redisplayed in the other of the first and second orientations after a preset duration, it would have been obvious to skilled in the art to recognize that Register and Reber 's handheld devices redisplaying the data page in both orientations and of course there should be a delay period between the two orientations.

Claim 25.

The computer program product of claim 30, wherein the portable device is a wireless telephone Register in fig. 4 illustrates a PDA that contains a wireless connection.

Claim 26.

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The computer program product of claim 30, wherein the portable device is a personal digital assistant Register in fig. 4 illustrates a PDA that contains a wireless connection.

Claims 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register, Reber, and further in view of O'Gorman, L. "The document spectrum for page layout analysis Pattern Analysis and Machine Intelligence, IEEE Transactions on Volume: 15 issue: 11 15. Issue: 11, Publication Year: 1993, Page(s): 1162 – 1173.

Claim 31.

Register and Reber do not teach the portable device determining a line width of textual content of the data page.

However, O'Gorman teaches the method of claim 28, wherein said analyzing comprises the portable device determining a line width of textual content of the data page. O'Gorman teaches page layout analysis that is a document processing technique used to determine the format of a page. See page 1162 at first paragraph right column teaches the docstrum method for page lay-out analysis is described. This is advantageous over many other methods in three main ways. One is that analysis is independent of page orientation or skew. There is no need to find the skew and correct it prior to docstrum analysis; however, a precise measure of orientation is a byproduct of the analysis. The second is that the method does not require a priori input of character size and line spacing. Instead, these parameters are determined in the course of the analysis. The third is that this technique can be applied to an image containing subregions of different document characteristics. For instance, the docstrum can be used to segment

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independently oriented smaller documents (receipts, checks, index cards, business cards, etc.) in a single image, also see figs. 9-11 illustrate determining a line width of textual content of the data page. Examiner believes the computer output under "introduction" may be referred as a display area and a computer Laptop contains a display area i.e. also a portable device.

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of O'Gorman into Reber's and Register's teachings in order to determine an image containing subregions of different document characteristics. For instance, the docstrum can be used to segment independently oriented smaller documents (receipts, checks, index cards, business cards, etc.) in a single image.

Claims 32-33 are rejected with similar reasons as set forth in claim 31, above.

Claim 34.

O'Gorman teaches the method of Claim 28, wherein the data page is a web page, because it would have been obvious to one of ordinary skill in the art to recognize fig. 11 can be considered as a web page.

Claims 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register, Reber, and further in view of A Hideaki Goto, Hirotomo Aso "Framework for Detecting and Selecting Text Line Candidates of Correct Orientation" Publication Year: 1998, Page(s): 1074 - 1076 vol.2. Hereinafter Goto.

Claim 31.

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Register and Reber do not teach the portable device determining a line width of textual content of the data page.

However, Goto teaches the method of claim 28, wherein said analyzing comprises the portable device determining a line width of textual content of the data page. See sections 2.1-2.3 of Goto stages 1-3.

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Goto into Reber's and Register's teachings in order to improve the processing speed of document analysis system.

Claims 32-33 are rejected with similar reasons as set forth in claim 31, above.

Claim 34.

Goto teaches the method of Claim 28, wherein the data page is a web page, because it would have been obvious to one of ordinary skill in the art to recognize figs. 1 and 2 can be considered as a web page.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAVID A. AMINI whose telephone number is (571)272-7654. The examiner can normally be reached on 7-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, xiao wu can be reached on 571-272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAVID A AMINI Primary Examiner Art Unit 2678

/JAVID A AMINI/ Primary Examiner, Art Unit 2678